



2019 ANNUAL REPORT

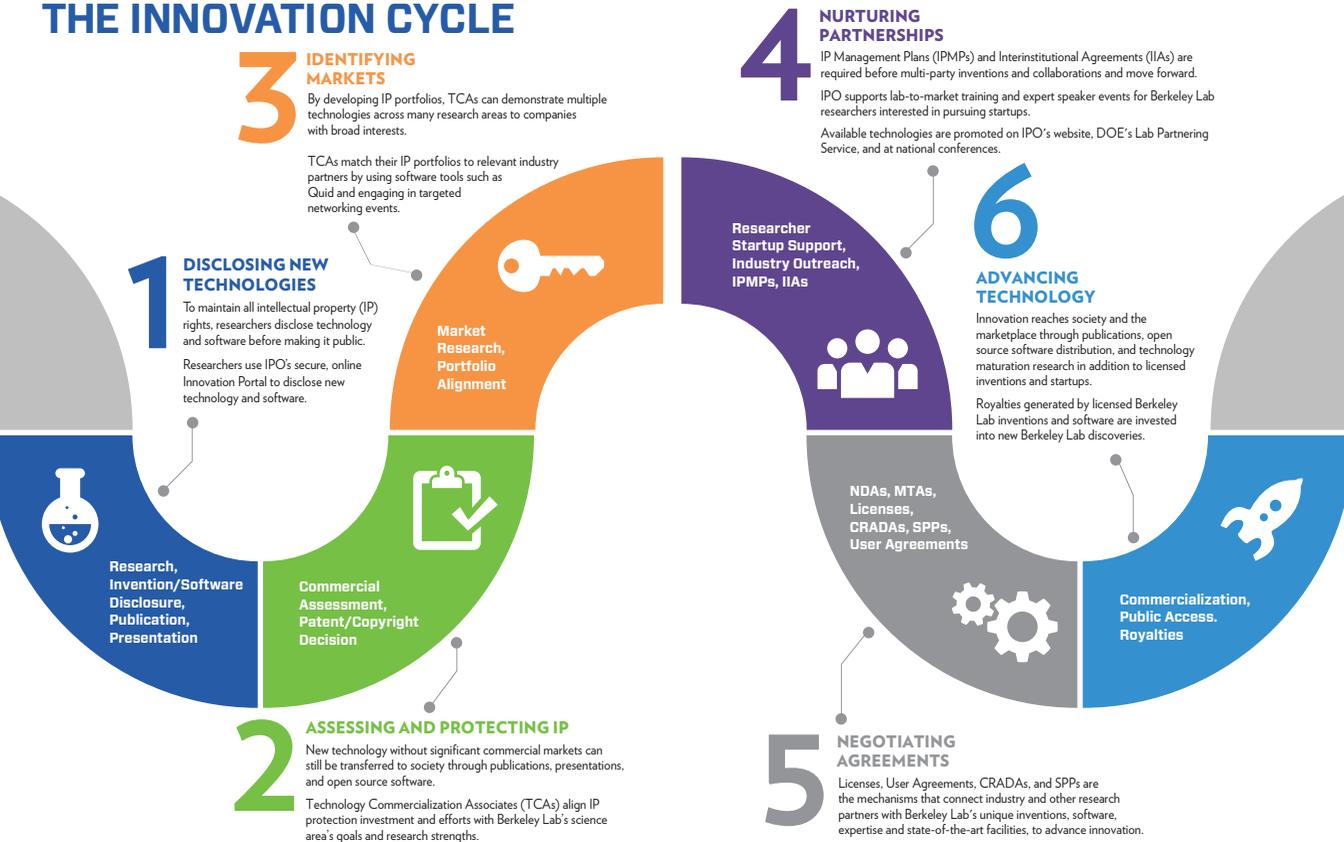




Successfully moving technologies from the lab into beneficial applications and outcomes requires behind-the-scenes evaluation, coordination, and communication among multiple stakeholders inside and outside Berkeley Lab.

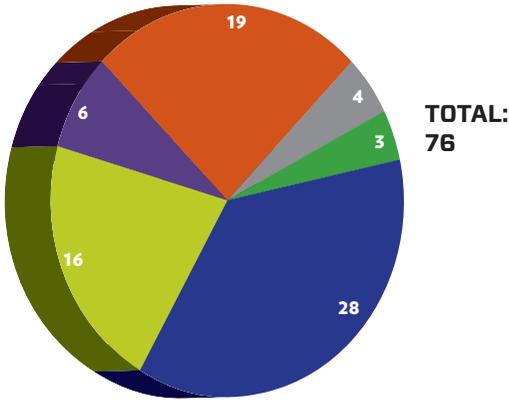
FROM LAB TO MARKET

THE INNOVATION CYCLE



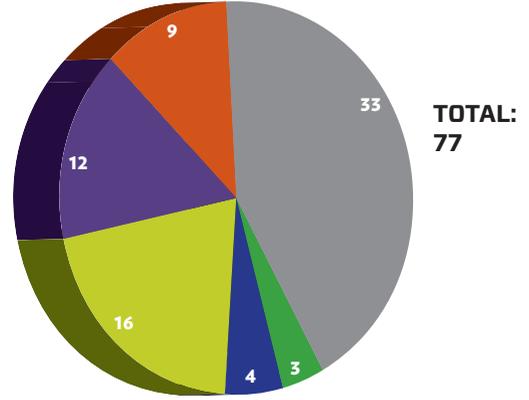
Lawrence Berkeley National Laboratory researchers who believe they have invented something unique disclose their inventions to the Lab's Intellectual Property Office (IPO). Computer software intended to be distributed outside the lab is also disclosed to IPO.

FY18 Invention Disclosures by Research Area



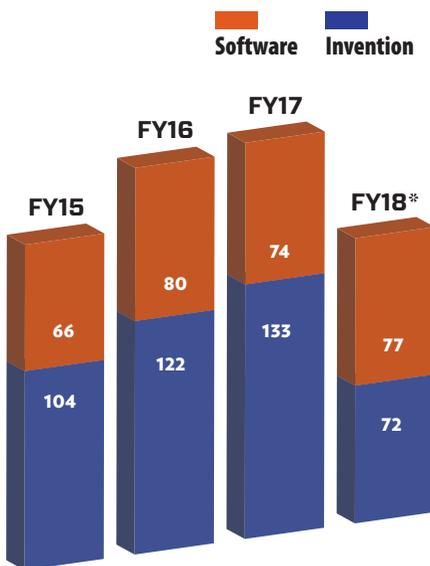
- Biosciences: 19
- Computing Sciences: 4
- Earth and Environmental Sciences: 3
- Energy Sciences: 28
- Energy Technologies: 16
- Physical Sciences: 6

FY18 Software Disclosures by Research Area



- Biosciences: 9
- Computing Sciences: 33
- Earth and Environmental Sciences: 3
- Energy Sciences: 4
- Energy Technologies: 16
- Physical Sciences: 12

Disclosures: 4 Year Trend



*Lab-wide total differs due to technologies with multiple inventors from different areas.

On March 1, 2018, the Innovation and Partnerships Office split into the Intellectual Property Office (IPO) and the Strategic Partnerships Office (SPO).

SPO handles collaborative research contracts and grants along with inter-lab work orders for both federal and non-federal research partners. Data for Strategic Partnership Projects (SPPs) and Cooperative Research and Development Agreements (CRADAs) will be reported by SPO going forward.

Industry partners from small businesses and startups to multinational companies license LBNL technology and software to commercialize for the marketplace.

Licensed technologies generate royalties for Berkeley Lab. For inventions disclosed after September 30, 1997, 35% of the net income from royalties—after reimbursing patenting costs or copyright registration fees—goes to the inventors, 15% goes to the research division where the invention originated, and 50% supports future lab research.

FY18 License Agreements*

*Some agreements include multiple technology or software licenses

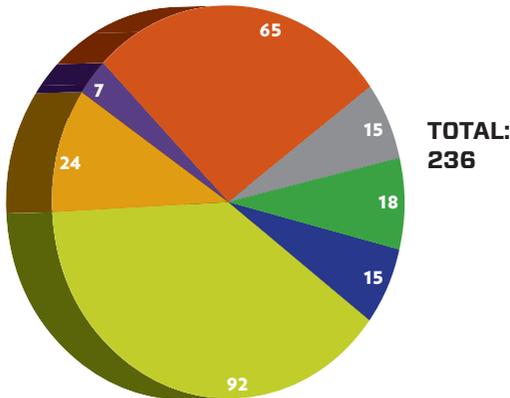
LICENSE TYPE:	
Bailment	4
Invention License	5
Option	4
Software	162

Royalties: 4 Year Trend

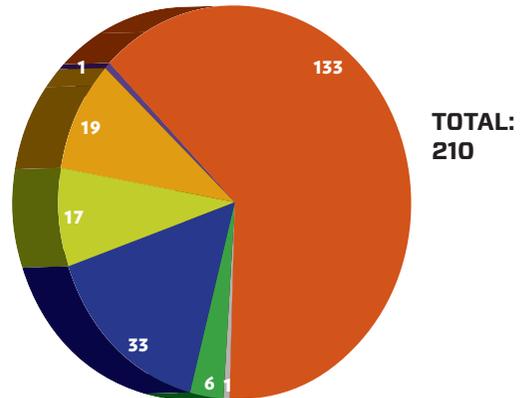


Non-Disclosure Agreements are requested by lab researchers and / or potential industry partners to protect information they may discuss. **Material Transfer Agreements** are required when Lawrence Berkeley National Laboratory and its partners **share research materials** for evaluation.

FY18 Non-Disclosure Agreements by Research Area



FY18 Material Transfer Agreements by Research Area

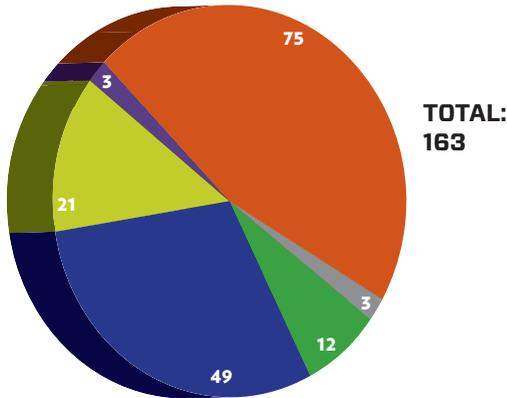


- Biosciences: 65
- Computing Sciences: 15
- Earth and Environmental Sciences: 18
- Energy Sciences: 15
- Energy Technologies: 92
- Operations: 24
- Physical Sciences: 7

- Biosciences: 133
- Computing Sciences: 1
- Earth and Environmental Sciences: 6
- Energy Sciences: 33
- Energy Technologies: 17
- Operations: 19
- Physical Sciences: 1

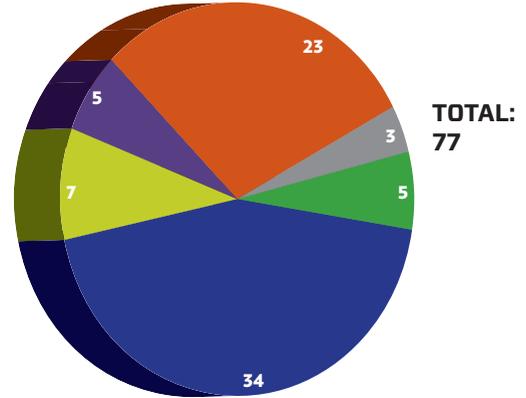
Filing patent applications on novel, useful, and non-obvious inventions makes them more attractive to potential industry partners and ensures LBNL and its researchers receive credit and a fair return once inventions are commercialized.

FY18 Patent Applications Filed by Research Area



- Biosciences: 75
- Computing Sciences: 3
- Earth and Environmental Sciences: 12
- Energy Sciences: 49
- Energy Technologies: 21
- Physical Sciences: 3

FY18 Patents Issued by Research Area



- Biosciences: 23
- Computing Sciences: 3
- Earth and Environmental Sciences: 5
- Energy Sciences: 34
- Energy Technologies: 7
- Physical Sciences: 5

IPO's patent attorneys and technology commercialization associates work together to identify potential markets and partners for new inventions and software and to determine next steps for patent or copyright protection.

IP Management Plans

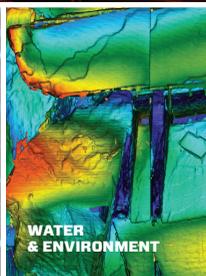
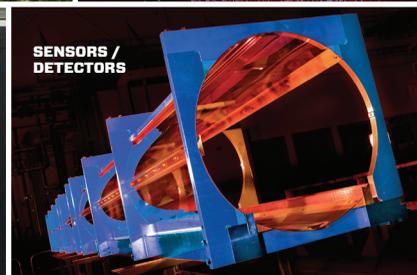
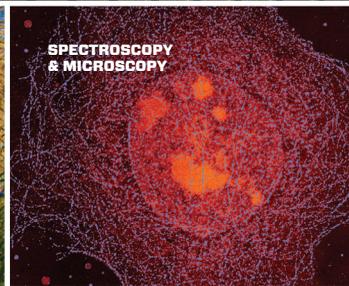
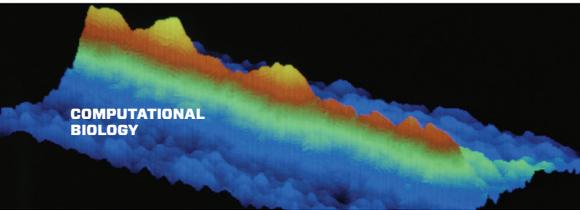
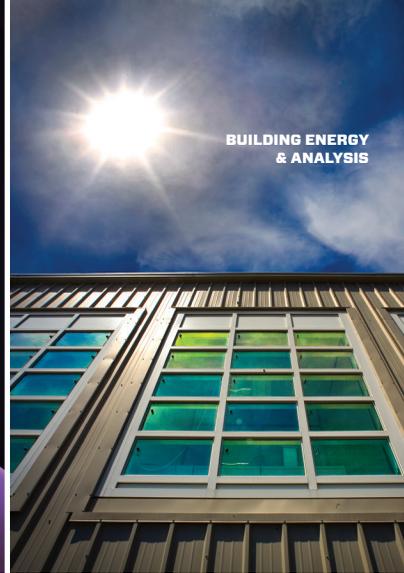
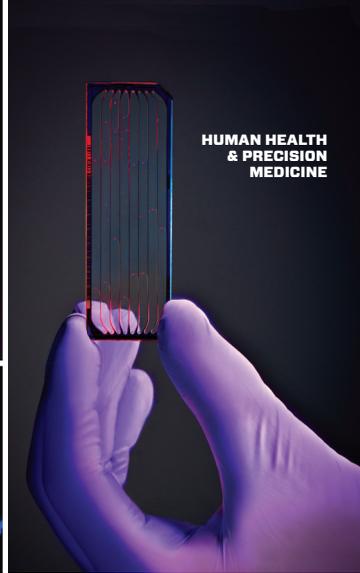
An Intellectual Property Management Plan (IPMP) is established to manage IP expected to be created under a single research award involving multiple parties—universities, private companies, and/or other DOE national labs. Without the IPMP in place, the research project is not funded and work cannot begin.

In FY18, IPO negotiated two (2) IPMPs, each with four parties, to enable research funding into Lawrence Berkeley National Laboratory.

Interinstitutional Agreements

An Interinstitutional Agreement (IIA) is negotiated between partners who jointly own IP to manage patent filing and prosecution as well as future licensing of the IP.

In FY18, IPO developed seven (7) IIAs with universities and research institutions, ensuring that scientific discoveries ultimately reach the marketplace, to benefit society.



LAWRENCE BERKELEY NATIONAL LABORATORY EXPERTISE



1 Cyclotron Road • MS 56A-0120 • Berkeley • CA • 94720

ipo@lbl.gov